

CLAIMS

I claim

1. A method for preparing an etchant comprising tetramethylammonium hydroxide, dissolved silicate ions, and water, wherein a liquid source of dissolved silicate ions is mixed with tetramethylammonium hydroxide and water.
2. The method of claim 1, wherein said liquid source of dissolved silicate ions is a colloidal suspension of SiO_2 .
3. The method of claim 2, wherein said etchant is heated to a temperature substantially above room temperature for the purpose of causing said colloidal suspension of SiO_2 to dissolve.
4. The method of claim 1 further including addition of an oxidizer into said etchant at a time later than ten minutes following immersion of a sample comprised of silicon in said etchant.
5. The method of claim 4 wherein said oxidizer is ammonium peroxydisulfate.
6. The method of claim 4 wherein said oxidizer is obtained from a liquid source of oxidizer.
7. The method of claim 6 wherein said liquid source of oxidizer is a solution of ammonium peroxydisulfate.

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